



Wisconsin Department of Transportation

Division of Business Management
Bureau of Human Resource Services
4802 Sheboygan Ave.
P O Box 7915
Madison, WI 53707-7915

Telephone: 608-266-2615
Teletypewriter (TTY): 608-267-0259
FAX: 608-264-9972

September 14, 2006

Dear Applicant:

Thank you for your interest in the Civil Engineer-Transportation Advanced position within the Division of Transportation System Development. This exam is for a position that is responsible to serve as the Traffic Signal Systems Engineer. The current vacancy will work out of the Central Office-Hill Farms Madison office and the register created by this vacancy will be used to fill other vacancies as they occur statewide.

The first step in the selection process will be an evaluation of your experience by a panel of experts who are knowledgeable of the requirements for the position. For this evaluation, you will need to complete the attached exam. The exam has been designed to obtain specific, factual information about certain aspects of your experience that are particularly important to this position.

The evaluation of your qualifications for this position will be based solely on your response to the exam. The evaluation panel will NOT have access to your state application form or any other materials you may submit with your application.

After the evaluation of all exams, and as vacancies occur, those candidates who appear most qualified for the position will be invited to participate in the next step of the selection process. Your ranking will vary based on the number of applicants selecting the same employment areas as you select.

Refer to the attached Instruction sheet for further information on applying for this position. **PLEASE NOTE:** If you send the files electronically, make sure you scan the state application, veteran form, instruction sheet and affidavit sheet that requires your signature and place them in **pdf format**. Your response to the exam questions can be sent in a Word document or scanned like the other documents. **Or**, you may print out and mail all the application materials to:

Mary Schneider; DOT Bureau of Human Resource Services, Room 410; P.O. Box 7915; Madison, WI 53707-7915, to be received **by 4:30 p.m., October 2, 2006**. Late materials will not be accepted if it would cause a delay in the scoring process. If you have any questions, please call me at (608) 266-7536.

Sincerely,

Jeff Fischer
Human Resources Specialist
Enc.

WISCONSIN DEPARTMENT OF TRANSPORTATION

CIVIL ENGINEER - TRANSPORTATION ADVANCED
TRAFFIC SIGNAL SYSTEMS ENGINEER

Job Announcement Code 0603048

INSTRUCTION SHEET

The following exam has been designed to obtain specific, factual information about those aspects of your experience that are particularly important to this position. These experiences may include part-time or full-time employment, internships, volunteer activities, or relevant academic course work.

INSTRUCTIONS TO THE APPLICANT:

1. Please complete the attached exam questions by keeping in mind the most relevant example of past achievements in your response.
2. **DO NOT PROVIDE AN EXISTING RESUME OR TRANSCRIPT IN LIEU OF THIS EXAM.**
3. Your name should appear only on the state application form, affidavit sheet, and the bottom of this page.
4. **Return** this Instruction sheet, the Employment Requirement Affidavit, the Application for State Employment (OSER-DMRS-38) that can be attained at <http://oser.state.wi.us/category.asp?linkcatid=392&linkid=28>, the Veteran Preference Supplement form (if applicable), and your responses to the examination **by 4:30 p.m. October 2, 2006**. You may choose to send the materials via the mail or electronically.
5. PLEASE NOTE: if you send the files electronically, send them to mary.schneider@dot.state.wi.us and make sure you scan the state application, veterans form, affidavit sheet and the instruction sheet that requires your signature and place them in **pdf format**. Your responses to the exam questions can be completed in a Word document or scanned like the other documents. **Or**, you may print out and mail all the application materials to: Mary Schneider; DOT Bureau of Human Resource Services, Room 410; P.O. Box 7915; Madison, WI 53707-7915. Late materials will not be accepted if it would cause a delay in the scoring process.

PLEASE READ AND SIGN THE FOLLOWING STATEMENT AND RETURN WITH APPLICATION MATERIALS.

I understand that this questionnaire is a test and that the practice or attempt to practice any deception or fraud will result in my application being withdrawn or removal from the position if I am hired. I certify that all information provided herein is true to the best of my knowledge, that I prepared the responses to this checklist without assistance other than typing or reproduction, and that the information can be verified if necessary through persons I have named as references on my application or by other persons whom I can name as references if requested.

SIGNATURE: _____ DATE: _____

NAME (Print): _____ SOCIAL SECURITY #: _____

ADDRESS: _____ HOME PHONE: () _____

CITY, STATE, ZIP: _____ WORK PHONE: () _____

**CIVIL ENGINEER - TRANSPORTATION ADVANCED
TRAFFIC SIGNAL SYSTEMS ENGINEER
GEOGRAPHIC LOCATION PREFERENCE SHEET**

Listed below are the locations in which employment may be available. Please indicate the location(s) for which you would like to receive employment consideration by placing a checkmark in the space provided; check all those that you would consider.

Employment Areas (Check ALL that you will accept)

- | | |
|--|--|
| <input type="checkbox"/> Southwest Region, Madison East | <input type="checkbox"/> Southwest Region, La Crosse |
| <input type="checkbox"/> Southeast Region, Waukesha | <input type="checkbox"/> Northeast Region, Green Bay |
| <input type="checkbox"/> North Central Region, Wisconsin Rapids | <input type="checkbox"/> North Central Region, Rhinelander |
| <input type="checkbox"/> Northwest Region, Eau Claire | <input type="checkbox"/> Northwest Region, Superior |
| <input type="checkbox"/> Central Office-Hill Farms, Madison West | <input type="checkbox"/> Northwest Region, Spooner |

EMPLOYMENT REQUIREMENT AFFIDAVIT

Check **ALL** the appropriate boxes below for the qualifications that you possess:

- ☐ Current registration as a Professional Engineer (P.E.) in the state of Wisconsin.
- ☐ Certification as an Engineer-in-Training (E.I.T.) in the state of Wisconsin.
- ☐ Have graduated from a recognized college or university with a degree in a related engineering field such as civil or environmental engineering or have equivalent professional training and practical experience so as to be deemed a professional engineer as defined in Department of Regulation and Licensing per s. 443.01, Wis. Stats **and** also be deemed qualified to engage in professional engineering practice as determined by the Department of Regulation and Licensing per s.443.04 or 443.05, Wis. Stats.

AFFIDAVIT: PLEASE READ AND SIGN THE FOLLOWING STATEMENT

I certify that the information provided above in application for the Civil Engineer Transportation – Advanced is true to the best of my knowledge, and that the information can be verified if necessary.

SIGNATURE: _____ DATE: _____

EXAM QUESTIONS

Your response to the following exam questions will additionally be rated for written communication skills.

Question number 1.

Describe the breadth and scope of your experience in designing and/or conducting reviews of transportation facilities for traffic operational and safety purposes. Be sure to emphasize how you relate safety engineering considerations to signal operations design considerations. Describe your experience in using national and WI Dept. of Transportation or comparable state guidelines to integrate traffic operations concepts into the design process.

Question number 2.

Describe your experience (the process) in reviewing a policy or procedure for either development or modification of a traffic operations system and detail your role (be specific if you were part of a team process) from the stage of problem identification through creation of the policy or procedure to implementation of changes. Be sure to describe the nature of the policy/procedure and explain the impact to the organization.

Question number 3.

Describe your experience in using the Wisconsin Manual on Uniform Traffic Control Devices (MUTCD), specifically Part 4 of the MUTCD-Highway Traffic Signals, in design work or other work processes, and/or providing expertise in the form of counsel or technical knowledge to others. Be sure to describe the complexity of the traffic issue for which the manual was used.

Question number 4.

Describe your experience in traffic signal design. Be sure to elaborate on the complexity of the design and the hardware you worked into your design as well as the software used to create the design.

DON'T FORGET TO SEND IN A COMPLETED COPY OF THE STATE APPLICATION FORM WITH ALL YOUR OTHER EXAM MATERIALS

Visit <http://oser.state.wi.us/category.asp?linkcatid=392&linkid=28> to obtain a copy of the State Application form and Veteran Preference Supplement form (if applicable).

DEADLINE: 4:30 p.m., October 2, 2006

Summary of Position Description of Current Vacancy:

Provide extensive support and expertise necessary for the development of standards and guidelines for the selection, implementation and evaluation of projects to enhance highway safety, operations, efficiency and air quality relating to the statewide transportation improvement and operations programs. Review and approve Division of Transportation System Development (DTSD) requests for traffic control signal installations and traffic regulations. Provide statewide expertise on traffic control signals and systems design and operation. Function as the traffic engineering liaison for assigned Regional Operations Sections. Function as a resource for Bureau of Highway Operations (BHO) involvement with the development of laws and rules with Traffic Engineering and highway safety implications. Administer the regulation of speed limits and coordinate speed management programs on a statewide basis. Represent the State Traffic Engineer or BHO Director as directed.